How-to Guide for Boulder's Building Performance Ordinance Rating & Reporting Requirement

Step-by-step compliance instructions for commercial and industrial building owners to rate and report their building energy usage through Portfolio Manager.

November 2015 (Amended April 2016)

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Rating and Reporting Checklist

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Introduction

In support of community energy and climate goals, the City of Boulder enacted the Boulder Building Performance Ordinance (Ordinance No. 8071) on October 20, 2015. This ordinance requires privately-owned commercial and industrial buildings and city-owned buildings to do the following:

1. Annually rate and report building energy use using ENERGY STAR Portfolio Manager;
2. Perform energy assessments every ten years;
3. Perform retrocommissioning (RCx) every ten years and implement cost effective RCx measures within two years of the study; and
4. Implement one-time lighting upgrades.

This user guide provides step-by-step instructions on how building owners can comply with the annual rating and reporting requirement of the ordinance using ENERGY STAR Portfolio Manager.

Are You Affected?

Affected buildings include privately-owned commercial and industrial buildings (> 20,000 sf),[1] newly constructed[2] commercial and industrial buildings (>10,000 sf), and city-owned buildings (> 5,000 sf). The list of affected buildings, with building address and owner name, is available at BoulderBuildingPerformance.com.

[1] Large industrial or manufacturing campuses where multiple buildings are served by a central plant or single utility meter will be subject to the following custom requirements. This guide does not apply to these requirements. View these requirements here.
[2] Permitted since January 31, 2014 (when the new energy code went into effect).

Compliance Deadlines

The Building Performance Ordinance features a phased compliance schedule with initial 2016 deadlines shown below.

Affected Building	Rate and Report
City Buildings > 5,000	**May 1, 2016** (and May 1 each year thereafter)
Existing buildings* > 50,000 sf New buildings** > 10,000 sf	**August 1, 2016** (and June 1 each year thereafter)
Existing Buildings > 30,000 sf	**June 1, 2018**
Existing Buildings > 20,000 sf	**June 1, 2020**
Large Industrial Campuses are subject to a deadline of June 1, 2016 for their custom requirements. ***Any commercial or industrial building for which an initial building permit was issued on or after January 31, 2014.*	

Resources

For **FREE** assistance with or questions on rating and reporting using Portfolio Manager, visit the ENERGY STAR Portfolio Manager website or contact a local PACE Business Sustainability Advisor at 303-786-7223 or info@PACEpartners.com.[3]

For manufacturing firms who are choosing to rate and report using the ENERGY STAR Energy Tracking Tool, see Appendix C: Using the Energy Tracking Tool. Additional assistance is available from the Southwest Energy Efficiency Project (SWEEP). Contact Neil Kolwey at 303-499-0213 or nkolwey@swenergy.org for more information.

For questions about complying with the ordinance, contact the Program Administrator.

For additional resources, trainings, and detailed ordinance information click here.

Get Started

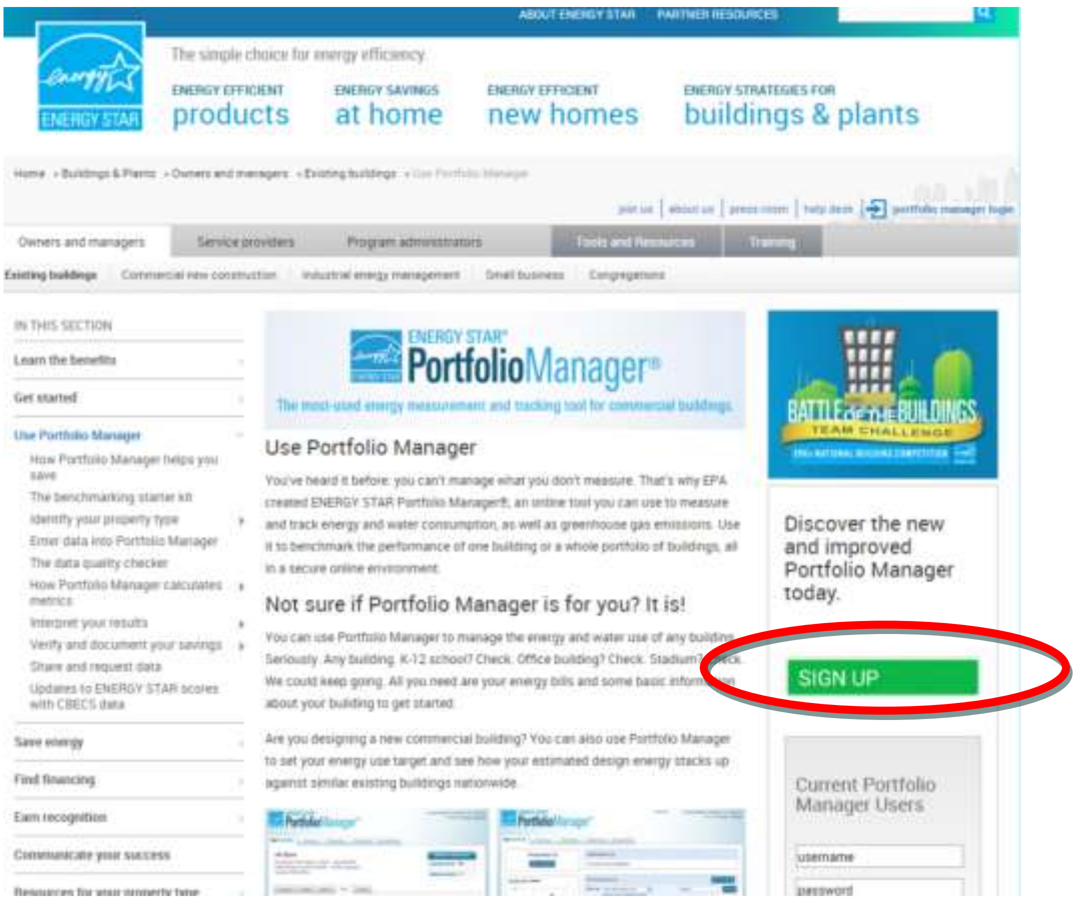
Follow this guide's step-by-step instructions for setting up your ENERGY STAR Portfolio Manager account, populating buildings and energy use, and reporting to the City of Boulder. *(For instructions complying using the Energy Tracking Tool, skip to Appendix C: Using the Energy Tracking Tool).*

[3] Partners for a Clean Environment (PACE) provides FREE expert advisor services, financial incentives and a certification program to help businesses in the City of Boulder and Boulder County measure and gain recognition for their energy, waste, water, and transportation achievements.

Step 1: Create an ENERGY STAR Portfolio Manager Account

If you already have an account with your buildings and meters added skip to Step 3.

1. Go to www.energystar.gov/benchmark, click “Sign Up” and provide the required information.
    a. If you are creating an account for your entire organization (e.g. for a property management company), consider setting up the first name and last name as the Company name.
    b. Select “conventional units” when completing the sign up.



For additional guidance, see http://www.energystar.gov/buildings/tools-and-resources/portfolio-manager-quick-start-guide

Step 2: Add Your Property

Once you have created an account, you can add your properties.[4]

1. Click "Add a Property" on the top left of the page.
2. Select the requested building characteristics such as primary function and number of buildings and click "Get Started."
    a. If your property, as listed on the **Affected Building List**, has multiple buildings, see this guidance on submitting your property as a campus.
    b. Note: If one building's gross floor area is less than the required square footage for the rating and reporting requirement, but is connected to the same meter as a building that is included on the affected buildings list, then the building owner should rate and report all buildings on the shared meter as a campus.
3. Provide the required property characteristics including name of property, address, year built, occupancy rate, and gross floor area.
    a. Building data such as year built can be found at the Boulder County Assessors Database. Building data such as the gross square footage can be found in the **Affected Building List** on the program website. If you believe any of this information is incorrect, please contact the Program Administrator.

***About Gross Floor Area**. GFA is the total property floor area, measured from the principal exterior surfaces of the building(s). Do **not** include parking.*

4. Carefully read and click any applicable check boxes and then click "Continue."
5. Review the **Basic Information** box and edit as needed. If your building has multiple uses, add additional space uses to your property by selecting an option in the drop down menu **Add Another Type of Use**, and then clicking "Add". This will open up a different list of attributes for that particular space type.
    a. If your property has an average occupancy rate less than 10% over 12 months, see *FAQ 6. What if my building isn't fully occupied?*

***How to Account for Parking.** When parking is part of a building, it does not count towards gross floor area, since Portfolio Manager focuses on the energy use of the actual building interior. For example, if you have a building with 100,000 square feet of office space and 20,000 square feet of parking, you should enter a gross floor area of 100,000 square feet into Portfolio Manager. You may be prompted to enter information on parking area, but it will not count towards your gross floor area.*

You have two options to receive an ENERGY STAR score for a property with an exterior parking lot or parking garage:

*Option 1. Sub-meter your parking and exclude its energy. (*Recommended*)*
- *Do not enter a parking Property Use*
- *Do not enter the energy for your parking in Portfolio Manager*

[4] If you need to upload multiple properties to the tool, we recommend using the tool's spreadsheet upload templates following the steps laid out on pages 3-4 of the guide: How to Get Utility Data into Portfolio Manager.

- *If your parking garage* ***is physically connected*** *with your building and part of a single structure, then the* ***parking (fully or partially enclosed) cannot be more than 75% of the total property GFA****. For example, a property that is 100,000 square foot, with 80,000 sq ft Parking and 20,000 sq ft Office is considered a Parking Garage by EPA and cannot receive an accurate ENERGY STAR score or earn ENERGY STAR certification. This limit does not apply to Open Parking Lots.*
- *If your parking garage* ***is not physically connected*** *to your building, but rather is a separate structure then there is no limit as to its size. For questions on underground parking see FAQ 2. How do I report standalone parking garages?*

Option 2. <u>*Benchmark your parking and its energy use.*</u>

- *Add a* ***Property Use*** *for your parking.*
  - *Report the Gross Floor Area (GFA) of each type of parking (Fully Enclosed, Partially Enclosed, and Open)*
- *Include all parking energy in your energy meters.*
- *Regardless of physical connection, the GFA of your Parking (Fully Enclosed and Partially Enclosed)* ***cannot account for more than 50%*** *of your total Property GFA.*

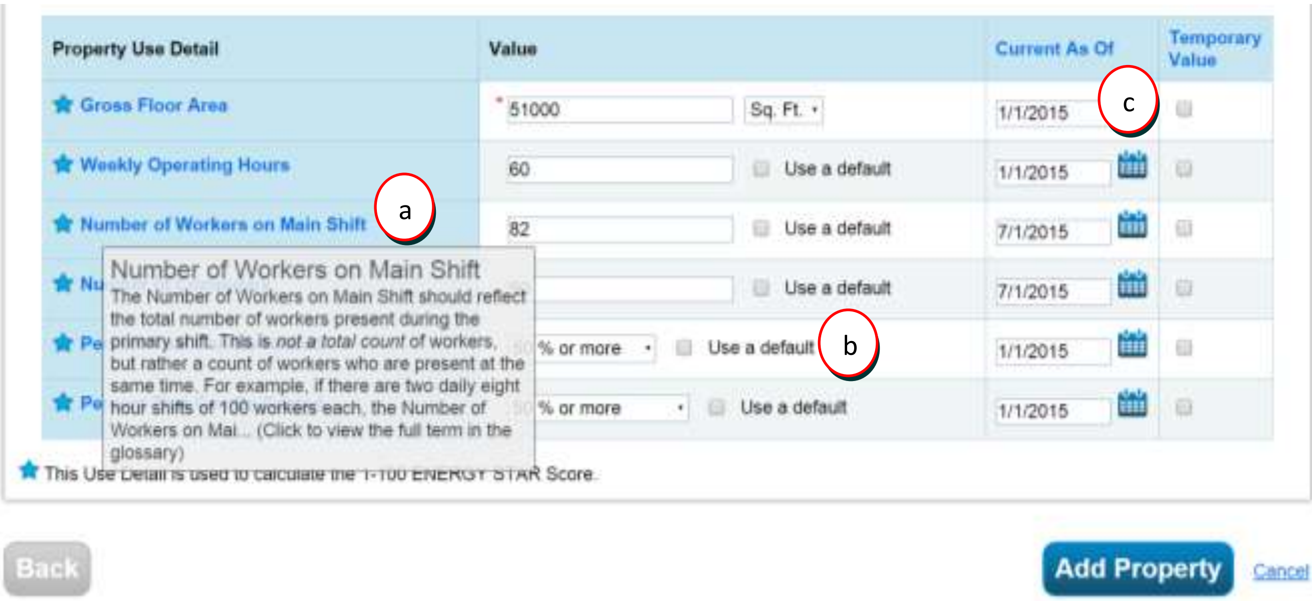
Definitions*.*
<u>*Open parking lots:*</u> *Paved areas lit and used for parking vehicles.*
<u>*Partially enclosed*</u>*: Area of any parking structure that is not fully enclosed. Parking structures with partial or no walls.*
<u>*Completely enclosed*</u>*: Parking structure enclosed on all four side and has a roof (such as underground parking or a fully enclosed structure on first few floors of a building).*

Review *this document* *for more information on accounting for parking.*

6. Once you have added all use types for the building, enter the use details including the gross floor area, operating hours, numbers of computers, etc. for each use type.
   a. The specific use details required will differ based on the property type selected.
   b. More information about property types, definitions, and use details can be found here.
7. **Important things to note:**
   a. Hover the computer mouse over each property use characteristic for definitions.
   b. If you don't have all the information with you, select "Use a Default". You can change these numbers later, but the defaults work well for typical buildings and are accepted by the City for rating and reporting.
      i. Keep in mind, using default values will prevent you from getting an ENERGY STAR score if you are eligible for one, so be sure to update to actual values as soon as possible.
   c. The **Current As Of** date refers to the first day the meter was used. This field auto populates from the date the building was built. If your use details have changed since the first date of rating, you should update the date to reflect when that change occurred. *For example, if the operating hours have been 60 hours per week all year, update the* ***Current As Of*** *date to January 1, 2015; but, if the number of computers*

*increased July 01, 2015, you should update the **Current As Of** date to reflect the date the computers were added (so July 01, 2015).*

i. If any of these values change in the future, you should update the **Current As Of** date to reflect the date these changes occur.



8. When you have finished adding uses and details, click “Add Property”.

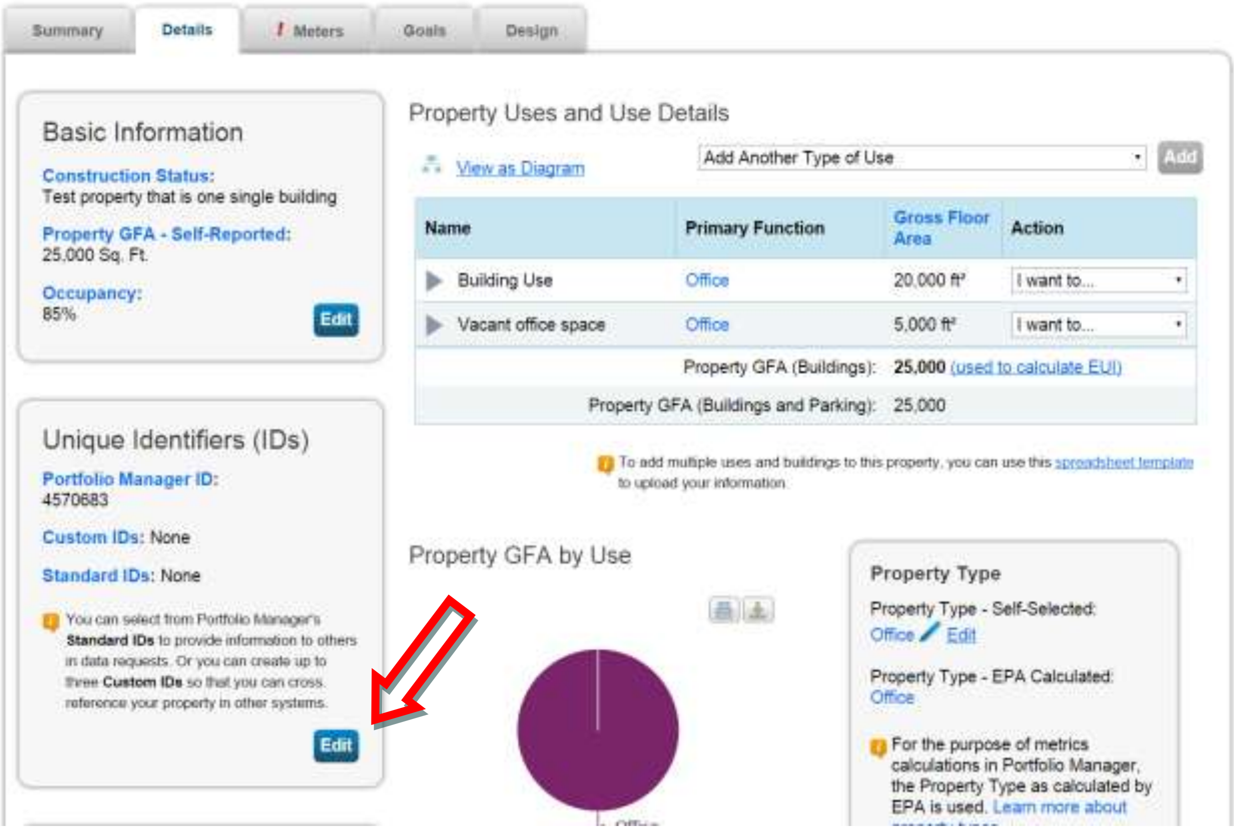
Making Changes? *To edit these use details later, click “Correct Mistakes” from the **Action** drop-down in the **Details** tab or see <u>Appendix A: Updating or Correcting the Portfolio Manager Report.</u>*

Step 3: Enter the Boulder Energy Reporting ID

Each building required to report energy performance under Boulder's Building Performance Ordinance has a unique ID, the **Boulder Energy Reporting ID. Adding this ID to your building ensures the usage reported is attributed to the correct building during compliance checks.**

*To locate your **Boulder Energy Reporting ID**, review your ordinance notification letter from the City of Boulder, or find your building on the **Affected Building List** on the program website.*

1. Open the **Details** sub-tab for your property.
2. Click "edit" in the box **Unique Identifiers (IDs)** in the bottom left.



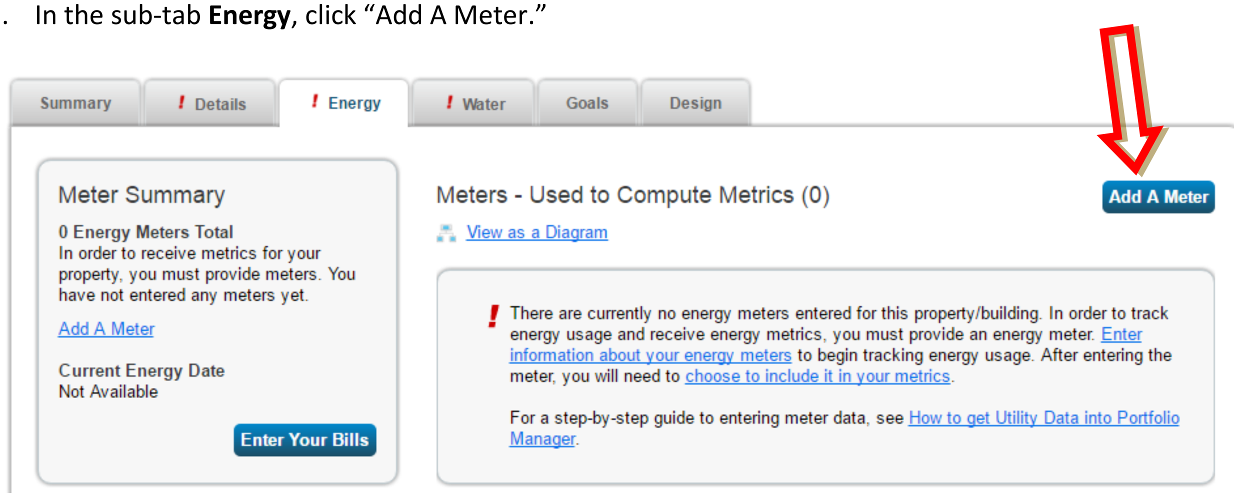
3. On the page that opens, scroll to the bottom and find the box that says **Standard IDs**.
4. In the dropdown box, select Boulder Energy Reporting ID.
5. Enter your Boulder Energy Reporting ID number in the ID box to the right and then click "Save".
6. You have now assigned your Boulder Energy Reporting ID to your building.

Step 4: Create Meters for the Property

In the **MyPortfolio** tab, you will now see the dashboard for your property. When setting up the energy meters in your building, you have the option to set up one meter for the entire building as an aggregated whole, set up individual meters for each tenant in your building (if sub-metered), or a combination. As the Building Performance Ordinance requires the benchmarking of total building energy use, setting up one meter for the entire building as an aggregate whole is the simplest option and the City of Boulder recommends using Xcel Energy's energy benchmarking service to do this.

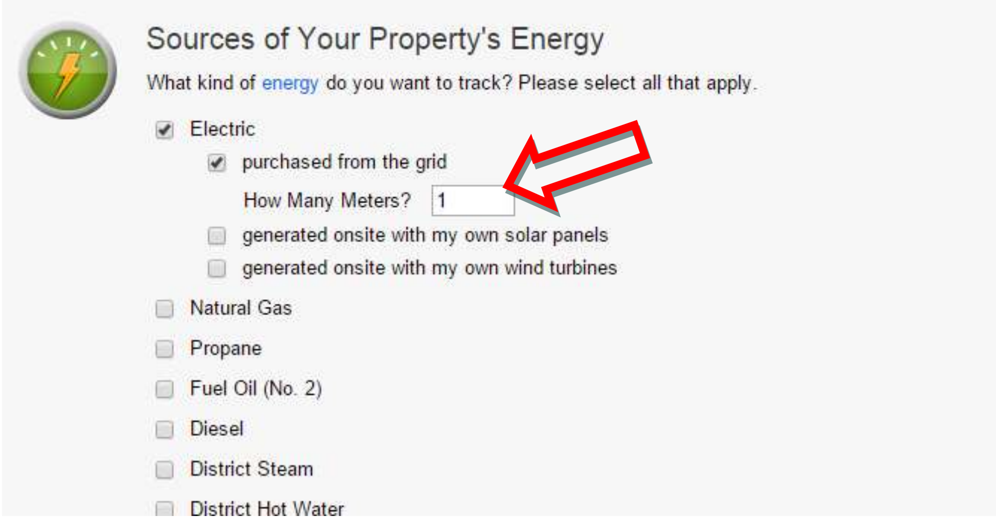
If you have a provider other than Xcel Energy or prefer to enter your data manually, please see Appendix B: How to Manually Collect and Enter your Data for the manual data entry steps.

1. In the sub-tab **Energy**, click "Add A Meter."



2. Check the applicable energy sources for your property.
   a. For the fuels provided by Xcel Energy you have options for selecting the number of meters:

Options	Number of Meters in Portfolio Manager
1	Enter one meter for each fuel served by Xcel Energy (i.e. one electric and one gas, if applicable) ***Recommended***
2	Enter one meter for each tenant (if sub-metered)
3	Enter one meter for each portion of the building you would like to analyze separately (i.e. one meter for retail and one meter for restaurant all in the same building)

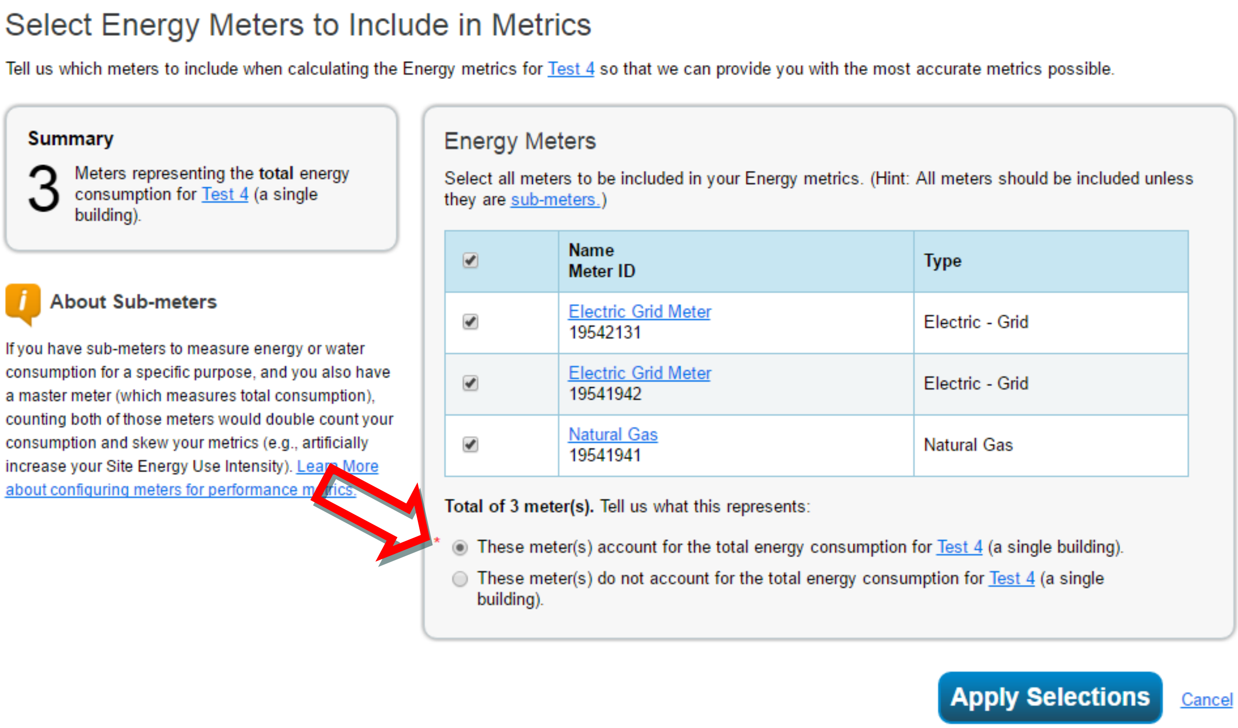


   b. Select the number of meters per fuel type and click "Get Started."

3. Click anywhere in the first meter to enter the meter information.
   a. Under **Units**, select "kWh" for the electric meter and "therms" for the natural gas meter (if serviced by Xcel Energy). **These units are required if collecting data through Xcel Energy's benchmarking service!**
   b. **Date Meter became Active** will be the date of the first meter bill for the building. This is often the year the building was built.
   c. Rename your meters in this table to help Xcel Energy understand what the meter represents.
      i. If you selected Option 1 above and have one meter per fuel you should indicate this when naming your meters. For example, you should name your electricity meter "Electricity – whole building."
      ii. If you are collecting meters by tenant or by portion of building, name the meter to reflect that (i.e. "Electricity - First floor retail")

Meter Name	Type	Other Type	Units	Date Meter became Active	In Use?
Natural Gas - Whole building	Natural Gas		therms	1/1/1980	✔
Electric- Whole building	Electric - Grid		kWh (thousand Watt-hours)	1/1/1980	✔

4. Select "Create Meters."
5. Because you are participating in Xcel Energy's automatic data upload, skip entering the energy use for the meters and click "Continue."
6. Check the boxes for each meter you created for the property and select the option "these meters account for the total energy/water consumption for this property".



7. Then click “Apply Selections.”
8. You must now connect with Xcel Energy’s Benchmarking portal to ensure the energy data is uploaded to the meters.

Step 5: Connect with Xcel Energy's Benchmarking Portal

You must open your web browser and go the Xcel Energy's Benchmarking portal at https://xcelenergy.force.com/benchmarking to connect with Xcel and request the auto-upload of energy data.

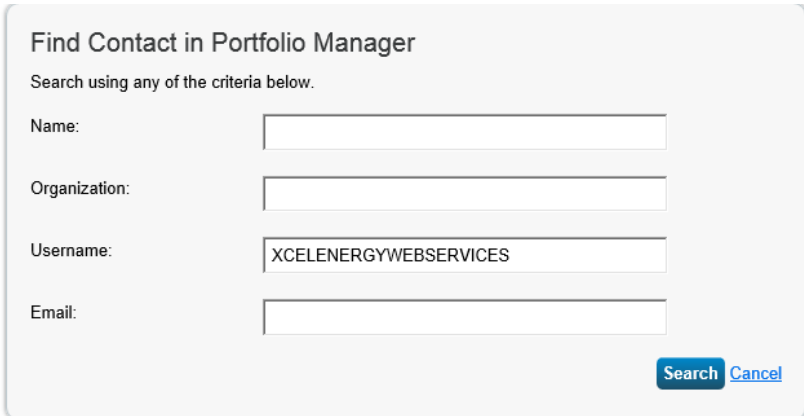
1. Click on "Sign Up" even if you have an existing Xcel account (this portal is separate from your online account access and you will need a new log-in for this portal).
    a. It is recommended you use the same email address that you used to set up your Portfolio Manger account when creating your portal account.

2. Once you submit, you will receive an email from Noreply@benchmaking.com requiring you to log in and change your password. Your account is now set up.

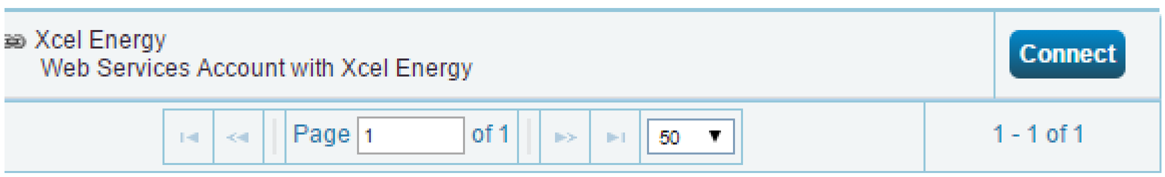
With your Xcel Benchmarking Account set up, you must now connect with Xcel and share your meters in Portfolio Manager.

1. Sign into your Portfolio Manager account and on the very top right of the page select "Contacts."

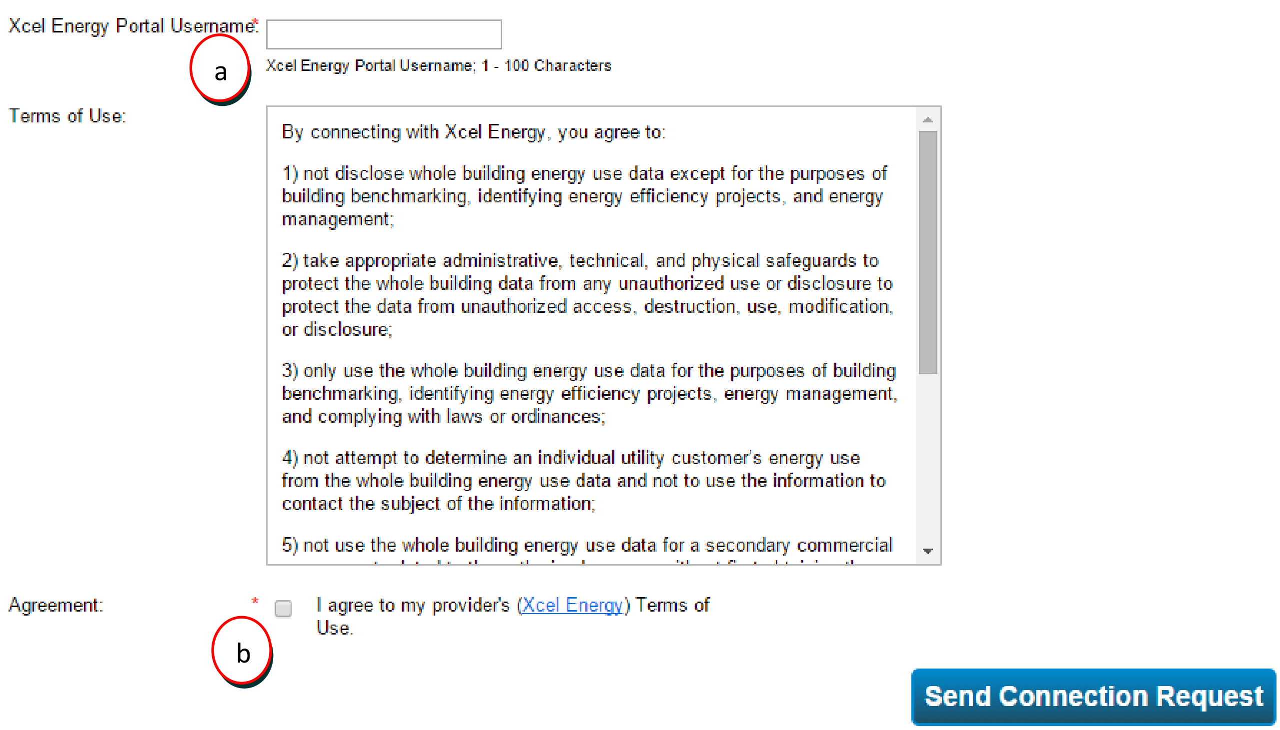
2. Click on "Add Contact" and under **Username** search "XCELENERGYWEBSERVICES."



3. Look for the Xcel Energy Web Services Account and click "Connect."



4. Complete the connection request
   a. For the "Xcel Energy Portal Username" type in the email you used to set up your Xcel Energy benchmarking portal account
   b. Check the Terms of Use Box.

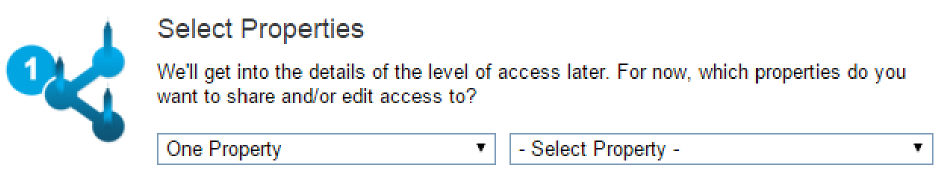


5. Click the "Send Connection Request."

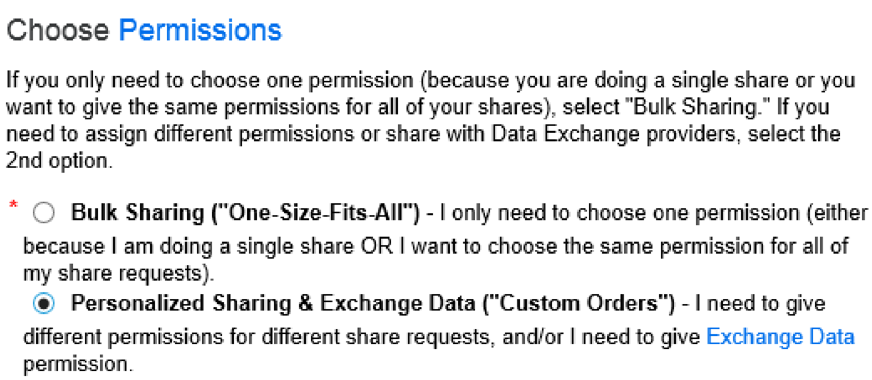
You will receive an email from Xcel Energy notifying you when your account connection has been received. (This may take up to 30 minutes). Once you receive this email this email, you can log back into your account to share your meters.

6. From your Portfolio Manager home page, click on the Sharing tab.
7. Click on "Share (or Edit Access to) a Property."

8. Select the property you would like to share with Xcel from the drop down lists.



9. Select the Xcel Energy contact from your Contacts List.
10. Select the permissions "Personalized Sharing and Exchange Data."



11. Click "Continue."
12. Select "Exchange Data."

Exchange Data
◉ Edit

13. Select "Full Access" for the property information and all meters that you created for fuels provided by Xcel Energy.

Select the permission level below that you would like to grant Xcel Energy for each category.

Item	None	Read Only Access	Full Access
Property Information	○	○	◉
▼ All Meter Information			
Natural Gas	○	○	◉
Electric Grid Meter	○	○	◉
Goals, Improvements, & Checklists	○	○	◉
Recognition	○		◉

14. Decide whether to "Share forward." This is not required.
15. Click on "Apply Selections and Authorize Exchange."
16. Scroll down and click on "Share Property(ies)."
17. Verify the sharing requests have been sent by looking at your notifications.

Type	Notification
	You are connected to Xcel Energy.
	Natural Gas - Whole Building - Share accepted by Xcel Energy
	Electric Grid Meter - whole building - Share accepted by Xcel Energy

18. Xcel will retrieve the connection requests and accept them. An email will be sent to you when the share request is accepted. (This may take up to 30 minutes).

Once accepted, Xcel will conduct several checks on your share request. Xcel will confirm you are the building owner, or you have the building owner's permission to access the benchmarking data for the building. Xcel will also verify the tenants in your building, the meters that must be pulled, and whether consent is required from any tenants in the building prior to sharing the data. Xcel will send you an email if any questions or issues arise. For additional information view Steps 7-10 in the Xcel user guide.

19. If no issues arise, Xcel will automatically upload your energy data into Portfolio Manager for the meters you shared. Monitor your Portfolio Manager account to confirm data has been uploaded.

	Start Date	End Date	Usage therms	Cost ($)	Estimation	Last Updated
	1/1/2015	1/31/2015	222.3			1/7/2016 Xcel Energy
	2/1/2015	2/28/2015	198.01			1/7/2016 Xcel Energy
	3/1/2015	3/31/2015	237.62			1/7/2016 Xcel Energy
	4/1/2015	4/30/2015	249.93			1/7/2016 Xcel Energy

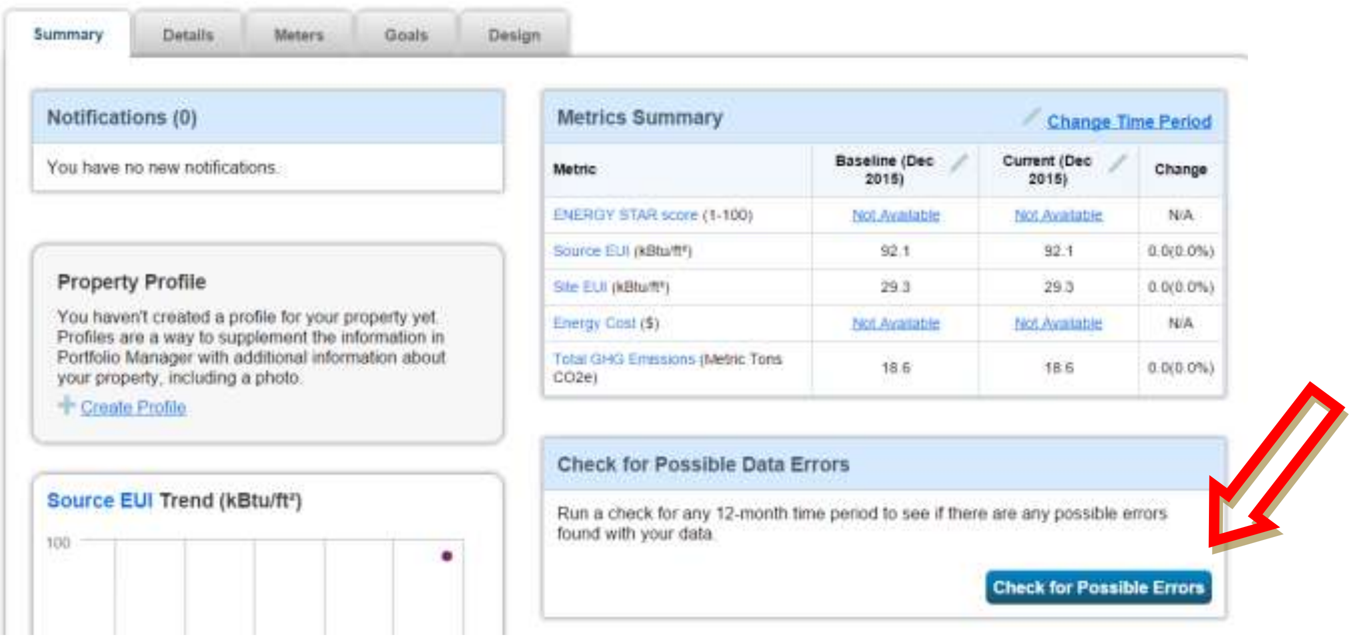
20. **When your Portfolio Manager account shows data uploaded through the end of the calendar year you must report on (for example, through Dec. 31, 2015), you can move on to Step 6.**
    a. Note – Xcel Energy will continue to upload your energy data each month.

Name	Energy Type	Most Recent Bill Date	Action
Electric Grid Meter - whole building	Electric - Grid		I want to...
Natural Gas - Whole Building	Natural Gas	12/31/2015	I want to...

Step 6: Run the Data Quality Checker

The Data Quality Checker is a built-in tool in Portfolio Manager that runs a set of basic data checks to identify potential data entry errors. Common alerts include temporary values, default values, less than 12 months of data, etc.

1. On the property's **Summary** sub-tab, under **Check for Possible Data Errors**, select "Check for Possible Errors."

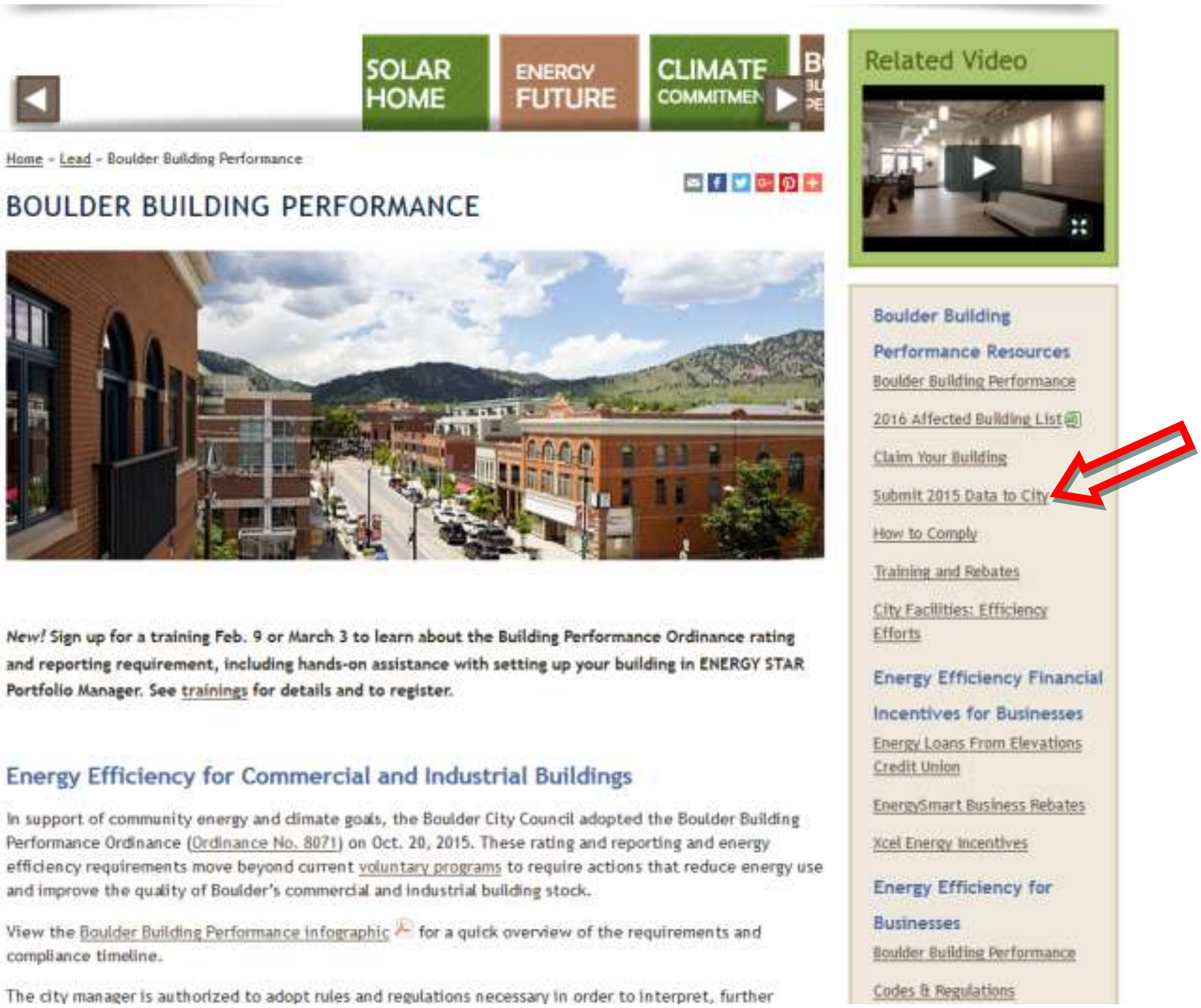


2. Select the last day of the year you are rating, for example December 31, 2015, and click "Run Checker."
3. Review the list of alerts (if any) and Portfolio Manager's suggestions to address the issue(s).
    - Common alerts include temporary or estimated values or less than 12 full calendar months of energy bills.
4. Following the links in the explanations, make corrections or updates to your property details to address as many alerts as possible. Temporary values (estimations) for energy data are acceptable, but you are required to fix any alert related to data covering less than 12 full months. Submittals to the City will be subject to a quality control review and will be rejected if data input errors are found. In that case, building owners will have thirty days to correct the errors and resubmit the data through Portfolio Manager.
5. Once you have made all applicable changes, re-run the checker to ensure that the alerts have been addressed.

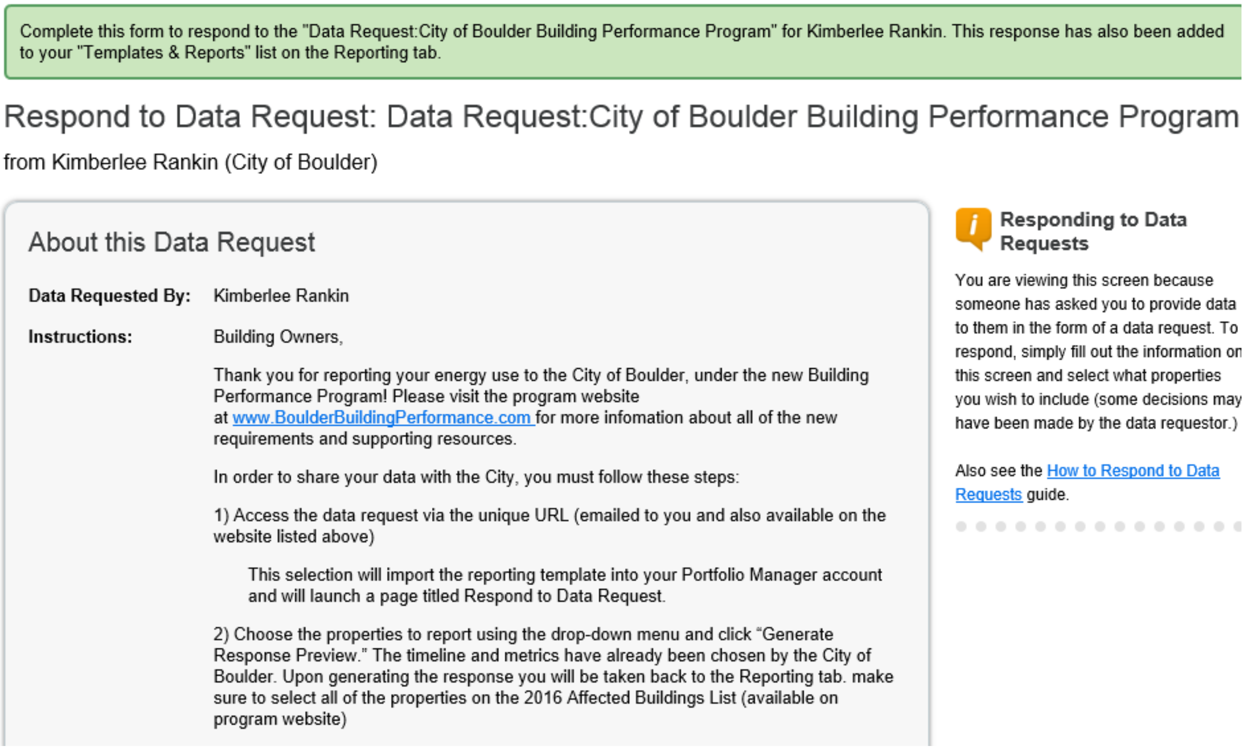
Step 7: Submit your Data to the City of Boulder

When you have completed the steps above, the City of Boulder reporting template will allow you to generate and submit your report to the city through Portfolio Manager.

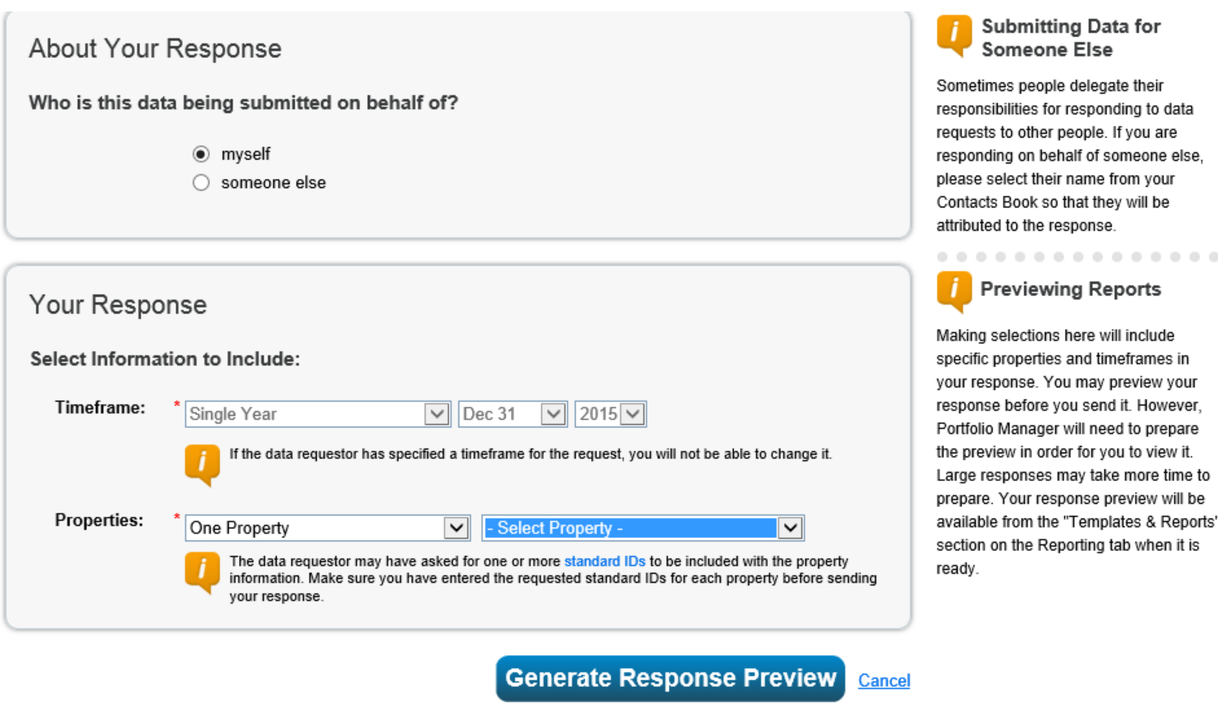
1. Access the Boulder Custom Reporting Template on the main webpage by selecting “Submit 2015 Data to City” in the Boulder Building Performance Resources.



2. This link will take you to the ENERGY STAR Portfolio Manager home page where you will need to sign in to your account.
3. Once signed in, the link will import the reporting template into your Portfolio Manager account and will launch a page titled **Respond to Data Request**. This page will include instructions for responding to the request.

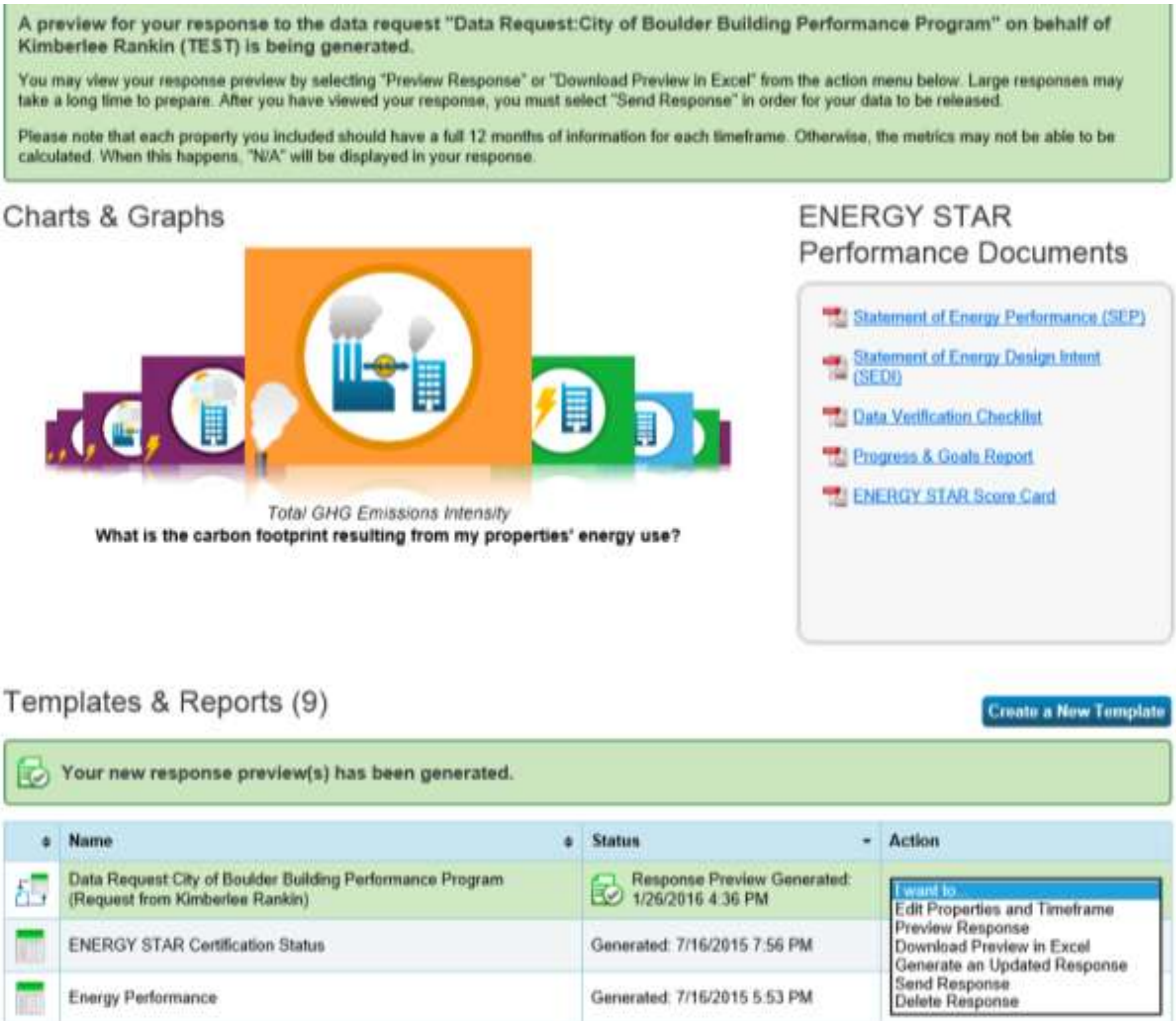


4. At the bottom of the page, you will need to choose the properties to report using the drop-down menu and click “Generate Response Preview.”

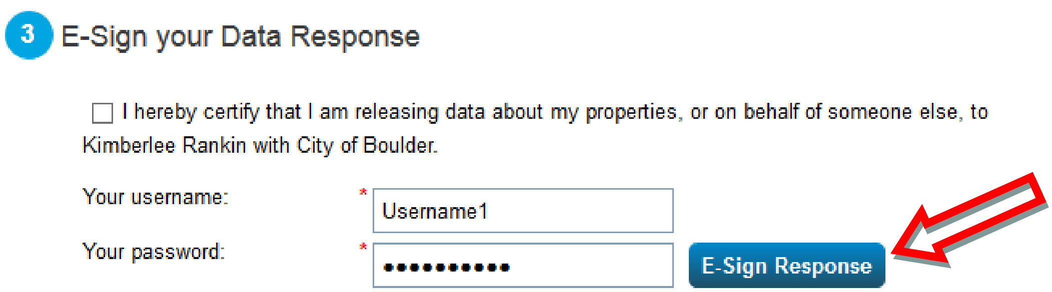


5. The timeline and metrics have already been chosen by the City of Boulder. Upon generating the response you will be taken back to the Reporting tab.

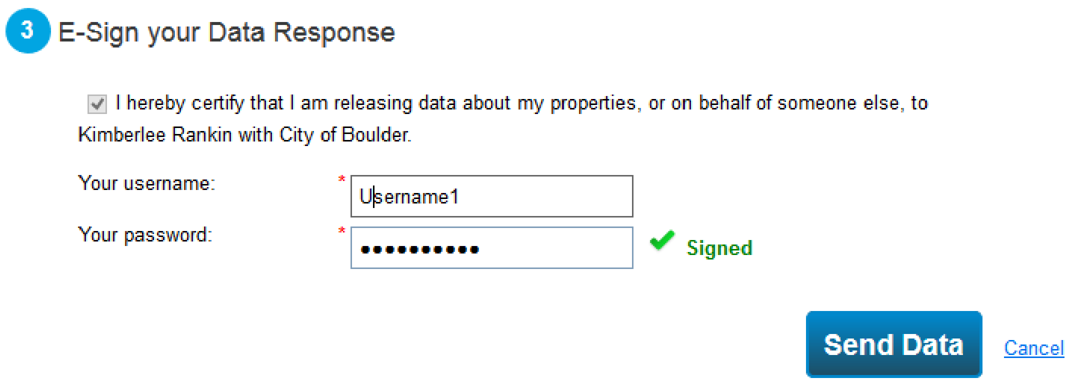
- If you see a red alert box, this means there is incomplete information. Click the "Read More" link to review the issues and use the links provided to correct them. Common mistakes include energy bills that do not cover the entire calendar year or blank square footage values.
- If you see a green box, your response has been generated and you are ready to submit.



6. You can preview this data response by selecting "Download Preview in Excel" from the dropdown in the **Action**.
7. When you are ready to submit to the city, in the **Action** column, select from the dropdown "Send Response."
8. On the page that appears, you must electronically sign your report by entering your Portfolio Manager login information and clicking "E-Sign Response."



9. You have signed successfully when you see a green alert with a checkmark.



10. Click "Send Data" and confirm submission by clicking "Continue." Your report has now been submitted to the city!
11. You will receive a confirmation email from the EPA informing you that your data has been submitted to the City of Boulder.
    - You can also access a Response Receipt on the **Reporting** page in Portfolio Manager.

For additional details on preparing a response to a data request, visit:
https://www.energystar.gov/sites/default/files/buildings/tools/EnergyStar_RespondData_508.pdf

You have now completed the required rating and reporting – thank you!

Errors or Updates? If, after submitting your data to the city, you discover that any reported rating information is inaccurate or must be updated, you must make the appropriate changes to the property in Portfolio Manager, generate an updated response, and re-submit it to the City within 30 days of discovering the inaccuracy. See Appendix A: Updating or Correcting the Portfolio Manager Report for instructions on updating your data.

Additional Guidance? For questions on Portfolio Manager, or for guidance on other capabilities such as running reports to collect energy snapshots of your building, contact a local PACE Business Sustainability Advisor by calling 303-786-7223 or emailing info@PACEpartners.com. For questions on Xcel Energy benchmarking, view the user guide and contact information at http://www.xcelenergy.com/energybenchmarking.

Appendix A: Updating or Correcting the Portfolio Manager Report

If, after submitting your data to the city, you discover that any reported rating information is inaccurate, you must make the appropriate changes to the building's Portfolio Manager Profile and generate an updated response and re-submit it to the City within 30 days of discovering the inaccuracy. Follow these instructions to re-report updated or corrected information to the City.

1. First, update or correct data by selecting the property in the Properties box in the **MyPortfolio** tab and selecting from the **Action** dropdown "Update Use Details" (If a change occurred in the building you want record of, such as additional square footage was added during a remodel) or "Correct Mistakes" (if you want to replace information reported previously that was incorrect).
2. After you save the changes, you must generate an updated report.
3. Under the **Reporting** tab, find the Boulder Reporting Template and from the **Action** dropdown, select "Generate an updated response".
    a. If Portfolio Manager generates an alert that some energy metrics could not be calculated, review and resolve any issue before submitting your response. If you make any changes you will need to generate an updated response.
4. You can preview the updated response by selecting "Download Preview in Excel" from the dropdown in the **Action** column in the **Reporting** tab.
5. Once you have reviewed and confirmed the data has been corrected, select "Send Response" in the **Action** drop down menu for the Boulder Reporting Template under **Template & Reports**.
6. On the page that appears, you must electronically sign your report by entering your Portfolio Manager login information and clicking "E-Sign Response".
7. Once your information is confirmed by a green **Signed** alert with a checkmark, click "Send Data" and confirm submission by clicking "Continue." Your updated report has now been submitted to the City and will automatically replace the data previously sent.
8. You will receive a confirmation email from the EPA informing you that your data has been submitted to the City of Boulder.
    a. Save this email as proof of submission.

Appendix B: How to Manually Collect and Enter your Data

If you are unable to use Xcel Energy's energy benchmarking automatic upload service, the process for manually collecting the energy data for the building depends on who is responsible for the energy bills of the building.

- If the owner pays the utility bills for the whole building, you can collect this consumption data through your service provider or from past bills.
- If your tenants are responsible for paying their utility bills, you must work with them to collect the consumption data from bills or individual utility accounts. This would require tenant consent. (See Data Privacy Rules in the box below). Or, you can try to request whole building consumption data from the service provider of that fuel by connecting with an account representative. This would often be provided in a spreadsheet format.

***Data Privacy Rules**: Due to lobbying efforts by the City of Boulder and other concerned municipalities, The Public Utility Commission (PUC) has made it easier for building owners to access whole building energy use data required for rating and reporting by implementing a new data aggregation standard. If there are 4 or more meters in the building, and no one tenant consumes more than 50% of the total energy use, the building owner, or their designee, can receive whole building energy use data from Xcel Energy, even if the tenants are sub-metered. In the case this rule is not met, tenants must sign consent forms to allow Xcel Energy to release the data to the building owner. For other regulated utilities, the consent form is available from the PUC or that utility.*

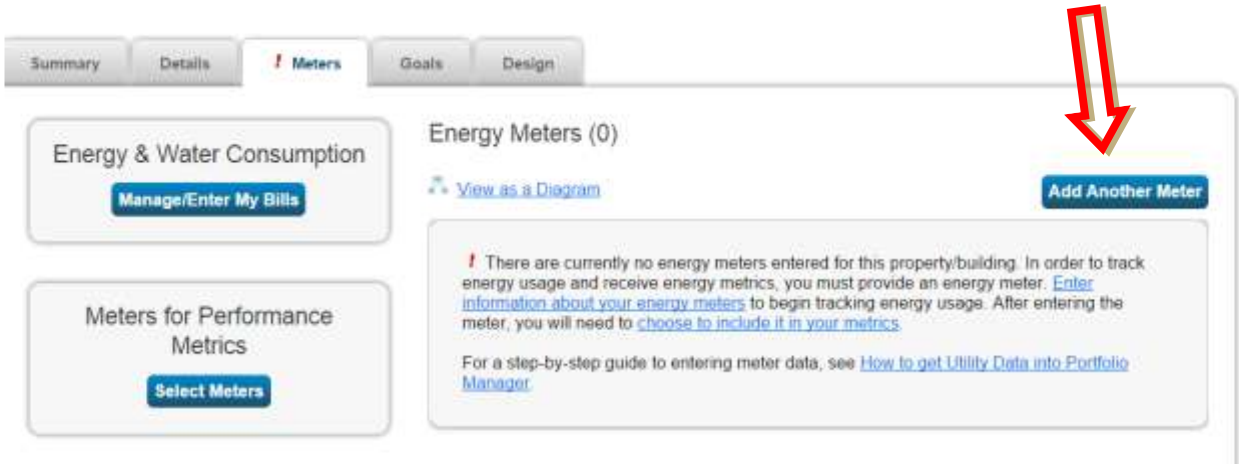
***Estimated Energy Use**. A building owner should be able to obtain whole building data from their tenants and/or their utility. If a tenant is not cooperating with this process, please inform them that they must respond to a data request within 30 days or they will be in violation of the city ordinance (Ordinance No. 807, Section 10-7.7-6(b)). If a tenant still fails to comply, contact the Program Administrator.*

If whole-building data is not available from your utility and you have been unable to receive data from your tenants, or any other suitable channel, the city may instruct you to estimate energy use. Contact the Program Administrator in this case.

Once you have collected the energy data for the building for the reporting year, you must create the meters and manually enter that data into Portfolio Manager, similar to Step 4: Create Meters for the Property.

In the **MyPortfolio** tab, you will see the dashboard for your property.

1. In the sub-tab Meters, click "Add Another Meter."



2. Check the applicable fuel type boxes for all meters, provide any additional requested information (such as whether the electricity is purchased from the grid or generated onsite and the number of meters), and then click "Get Started."
    a. If you are collecting aggregated whole-building data from your fuel provider, you can enter just one meter for each fuel you collected whole-building data for.
3. Click anywhere in the first meter to enter the meter information.
    a. **Date Meter became Active** will be the date of the first meter bill for the building.
    b. Carefully check the units of the data you are providing and select the correct unit from the drop down.
    c. Note: You can rename your meters in this table. If you are entering data for multiple meters, it is helpful to rename them according to your utility bill to make them easily accessible. For example, you can rename "Natural Gas #1" to your utility bill meter name "G-acct2951754/prem300731099/meter00000AB35807."
4. Select "Create Meters." Now you can enter the calendar year consumption data (*Note: Entering costs is not required*).
5. There are two options for entering data, manually uploading data from monthly bills or uploading whole-building data in a spreadsheet format received from your natural gas provider. **Remember** – the data provided must cover the entire calendar year with no gaps.
    a. <u>If you are entering monthly data from bills</u>, select "Click to add an entry."
        i. Keep in mind your end date for one billing cycle should not overlap with the start date for the next cycle. (i.e. If your January entry ends on 1/31/2015, your February entry should begin on 2/1/2015).
        ii. Remember - You can also use the simple spreadsheet template to upload all of your meter data for the year rather than entering data directly into the table.
    b. <u>If you have received whole-building data from your provider</u>, you can upload the data by downloading the spreadsheet template from Portfolio Manager, populating the template with the data received, then selecting "Choose File," selecting the data file on your local drive, and clicking "Upload."

Once you have entered or uploaded the property's complete usage data for the year, you will be asked which meters should be included in the property's total consumption.

6. Check the boxes for each meter for the property and select the option "these meters account for the total energy/water consumption for this property".
7. Then click "Apply Selections".
8. You will now see your property dashboard has updated with the usage data.

You can confirm that you have entered all information correctly by viewing the box in the top-right corner of the Summary tab of your property's page in the tool. Completed data will result in a number in either the Source EUI or ENERGY STAR Score fields:

Appendix C: Using the Energy Tracking Tool

Affected buildings with the primary use of assemblage, processing or manufacturing, or buildings where over 50% of building energy use comes from process loads, should use the ENRGY STAR Energy Tracking Tool (ETT) instead of Portfolio Manager to comply with rating and reporting.[5] Follow these instructions to rate and report your building using the ETT. For additional assistance view The Quick Start Guide at https://www.energystar.gov/buildings/tools-and-resources/energy_tracking_tool_quick_start_guide.

Step 1: Download the ETT

- The ETT is a free, online spreadsheet-based tool available from ENERGY STAR: https://www.energystar.gov/buildings/tools-and-resources/energy-tracking-tool
  - Make sure you enable the macros in Excel when you open the tool.
- The ETT opens to the Welcome page, which provides information on where to find instructions and tips for each worksheet, and a color-coded guide for entering information.
- The ETT has multiple worksheets for entering data, tracking, and performing a variety of analytical functions.
  - The other worksheets are initially hidden until you click on the Proceed to Main Menu arrow to start entering your data.
- To go to the Main Menu or advance to other ETT worksheets, click on the blue arrows.

Step 2: Set up your Building

- From the Main Menu tab click on the Basic Information button to set up your building.
  - Complete the tab by entering data into the green cells.
- Add your affected building under "Facilities."
  - You can use the address or building name to identify your building.
- For the ETT to calculate GHG emissions from purchased electricity, you first need to select the Electricity Region (from eGrid) for the building.
  - City of Boulder is in the RMPA eGrid region.

Step 3: Enter Energy Data

- Entering energy data for your organization and facilities enables the ETT to perform its central tracking and analytical functions.
  - Click on the blue Energy Data arrow to proceed to the Energy Data worksheet.
- You must use the pull-down menus to select the facility, fuel type, and energy units you are reporting.
  - Make sure you report each fuel type at the facility in its own row and enter the data in the correct units that match your unit selection.
  - Ensure you select the correct facility in each row for each fuel type reported.
- To enter data, click the checkbox "Enter Data" above the corresponding year's column and a series of green columns will expand to the immediate right.

[5] Manufacturing facilities should use the ETT rather than Portfolio Manager, unless the building's energy consumption data indicates that gross square footage is the best normalization metric when compared to an indicator of production such as units of product or value of shipments or sales.

- Enter you energy data for the entire calendar year in the green columns. You can choose to enter data by month or by year.
  - You can paste up to twelve months of data at a time using standard Excel copy and paste functions.
- If you want to track energy costs (optional), you can select the orange button "Go to Energy Costs."
  - Following the same instructions, you can enter the energy costs for the year, or by month, for each fuel reported.
  - Remember to enter all associated energy costs when entering energy cost data, including demand charges or other fixed charges.

Step 4: Enter Production Data

- Entering production data for your organization and facilities enables the ETT to calculate custom energy intensity metrics.
  - Click on the Production Data arrow to progress to the next worksheet.
- The ETT allows you to define your own production metric for the building you are reporting.
  - You can use the ETT to track production metrics at both the organization and individual building level, but you are only required to report production for the building per the Building Performance Ordinance.
- In the production metric column, identify which metric you will track and report for the building. (e.g., pounds of chocolate, number of widgets, total production labor hours, number of pieces processed, value of sales, etc.)
  - It is also possible to define a more complicated/hybrid production metric involving more than one variable.
  - Free assistance with choosing a meaningful production metric is available from SWEEP's Neil Kolwey at 303-499-0213 or nkolwey@swenergy.org.
- Similar to how you entered energy data, click the checkbox for the reporting year's column and enter the data in the green columns.
  - Again, you can enter the annual production value, or by month, in the appropriate green columns for that reporting year.

Step 5: Set Reduction Goals (Optional)

- The Reduction Goal worksheet allows you to set energy and GHG emission reduction goals, in terms of intensity-based or absolute reductions, for your organization as a whole as well as for individual facilities.
- This tab can track progress toward existing goals or new goals you would like to set.
  - Goals should be entered as the percentage change from the baseline year, not in annual reductions.
  - Use the Goal Assessment Tables to experiment with different reduction goals. Change the goal year to see what annual reductions are necessary to achieve the overall goal.
  - Click on the Reduction Goal Tracking button to see if you are on track to meet your goals. Or, continue on to the Dashboard, which provides a more streamlined, visual look at how your facilities are progressing toward your goals.
  - For more details on how the goals are calculated, click on the View Background Tables checkbox at the bottom of the page.

- Goals are optional for meeting the City's requirements. However, we encourage you to consider setting an energy goal to help drive improved energy performance. If you would like free assistance with identifying appropriate goals for your organization, please contact SWEEP's Neil Kolwey at 303-499-0213 or nkolwey@swenergy.org for more information.

Step 6: Generate Compliance Report

- The ETT generates several common reports that can be used to assess the performance of your organization or facility.
- The report "Plant Energy Performance Report" must be submitted to the City of Boulder for compliance with rating and reporting.
    - To generate this report, select the "Report Control" blue arrow.
    - Choose the scope of the report (i.e., select the affected building) from the pull-down menu in the upper left of the sheet.
    - Then select the report "Plant Energy Performance Report" by checking the box next to its title.
    - When you select the report's checkbox, the corresponding report will open as a new worksheet (visible as a tab along the bottom of the window).
    - Simply click on the tab to view the report.

Step 7: Complete and Submit Compliance Report

- The building owner must complete the green fields in the "Plant Energy Performance Report" prior to submitting it to the City of Boulder for compliance.
    - When completing "Property and Contact Information" add your **Boulder Energy Reporting ID** to your property name. (e.g. "Main Street Building – EB001")
- For "Production Values" you can report the annual production quantity, annual value of production, or both.
    - Make sure you report only the values for the reporting year (i.e. only 2015 values for your 2016 rating and reporting compliance).
    - If you are only reporting one value, leave the other blank.
- For "Planned Energy Projects" use this space to provide a summary of any planned energy projects at the building, or additional information relevant to the buildings energy use.
- One you have entered all required information in the report, save your additions.
- You will now need to make a copy of the report tab to submit to the City of Boulder.
    - Right click on the tab title at the bottom of the spreadsheet and select "Move or Copy."
    - From the drop down "To book:" select "(new book)"
    - Check the box "Create a copy"
    - Click "OK." A new workbook will open with a copy of the report.
    - Save this workbook, title the document "Energy Performance Report" with the building Energy Reporting ID and compliance year.
        - Example: "Energy Performance Report 2016_EB001"
- Email the report to the City of Boulder at Rankink@bouldercolorado.gov no later than the rating and reporting deadline (Aug. 1 2016 and June 1 each year thereafter).

Frequently Asked Questions

1. Which property uses should I select to represent my building?

Portfolio Manager has approximately 80 different property use categories. You should accurately represent all uses that are found within your building. A list of definitions is available at: www.energystar.gov/buildings/sites/default/uploads/tools/PropertyUseDetailsandDefinition.pdf

2. How do I report standalone parking garages?

If you are reporting a standalone parking garage, EPA recommends that you select the "Other" building type when creating the building. Do not check off "My building's energy use includes parking areas." Instead, just enter the total area of the garage (i.e., including parking) as the area of the building. This will prevent any error messages from coming up as you continue.

The ENERGY STAR score provides an assessment of the building, not its parking area. If it is not possible to sub-meter your parking area, then Portfolio Manager will estimate the amount of energy parking uses and subtract that out before calculating your metrics. Learn more in the technical reference for parking.

3. How is exterior site lighting reported (not parking)?

If site lighting (landscape, signage, safety lighting, etc) is on a different meter, the energy use from these areas should be included. Although you do not include these outdoor areas when calculating the Gross Floor Area (GFA) of a building in Portfolio Manager, you should include the energy use associated with these areas. The Portfolio Manager algorithms assume buildings of your type are expected to have outdoor usage, too. The GFA refers specifically to interior space. But the energy use evaluated in our algorithms should be all energy required to operate your building, which includes the energy used both inside and out.

3a. If it's not separately metered, is there a way for folks to input how much 24/7 site lighting they have, and normalize for operation hours? No. Specific hours of operation for the site lighting aren't an available input in Portfolio Manager.

4. I do not purchase my natural gas from Xcel. How do I get my natural gas consumption?

You will need to collect your natural gas bills and manually enter them into Portfolio Manager. Or, contact your natural gas supplier to determine the best method for collecting your monthly consumption for the calendar year.

5. What if I can't obtain whole building data from my utility?

A building owner should be able to obtain whole building data from their tenants and/or their utility. If a tenant is not cooperating with this process, please inform them that they must respond to a data request within 30 days or they will be in violation of the city ordinance (*Ordinance No. 8071, Section 10-7.7-6(b))*). If a tenant still fails to comply, contact the Program Administrator.

If whole-building data is not available from your utility and you have been unable to receive data from your tenants, or any other suitable channel, the city may instruct you to estimate energy use. Contact the Program Administrator in this case.

6. How do I determine the gross floor area for a building or for a property use within the building?

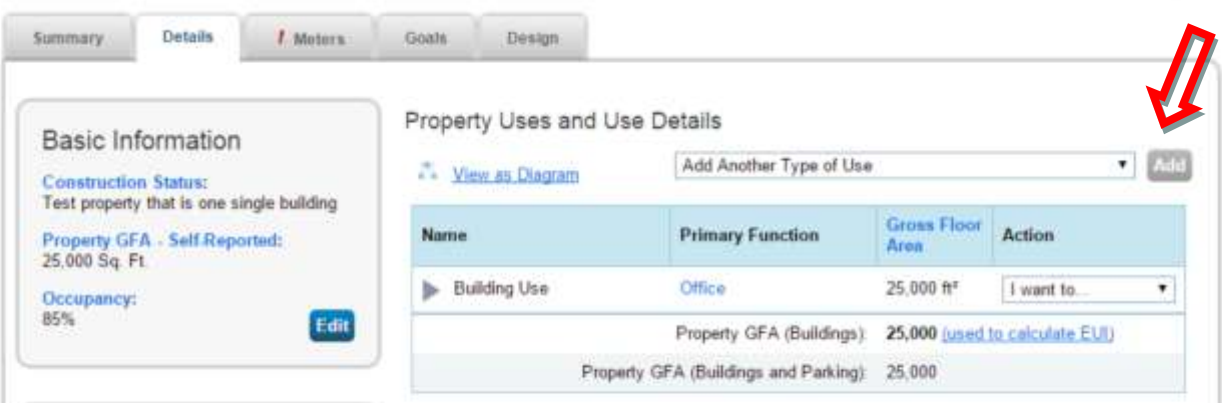
Many building owners will have information on gross floor area from leasing, sale, or other transactional documents. Other buildings will have plans that can provide dimensions for the building and/or individual property uses. Boulder County's tax assessor records may also have records of square footage in its permit database, however those records are often organized by parcel or building section, while rating and reporting happens at the building level. In conjunction, the gross floor area of common spaces and commercial condos can be estimated from building plans or measured; the City may also offer additional guidance, as needed, on measuring or estimating floor space.

The calculation of gross floor area is a one-time step, necessary only in the first year of reporting. Any estimation of floor area must be noted in "Property Notes." If the building square footage changes due to a physical change in the building such as a remodel, in Portfolio Manager go to the **Details** sub-tab for the property and under **Property Uses and Use Details**, select from the **Action** dropdown "Update with New Information." Then adjust the square footage and update the **Current As Of** date with the date the change took effect.

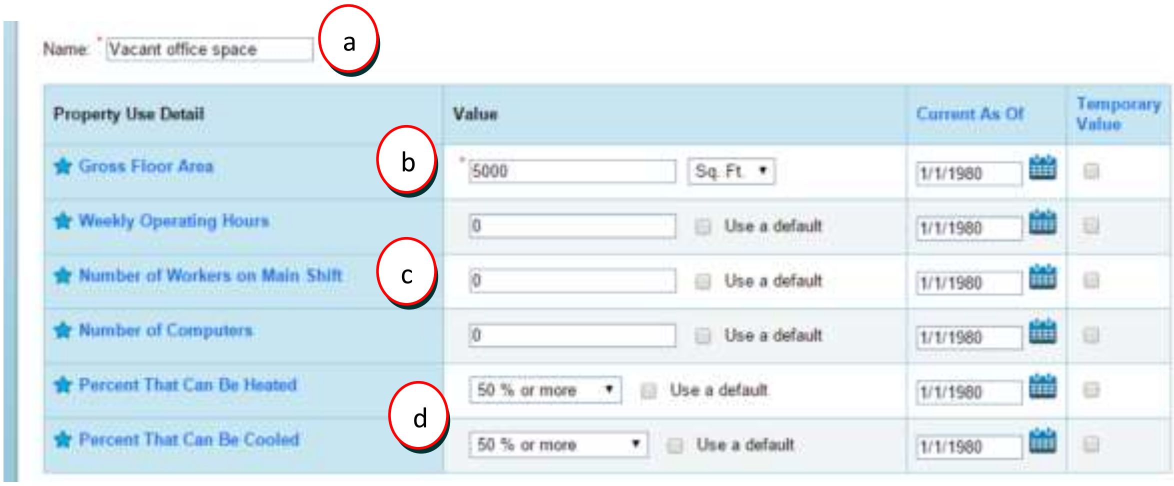
7. What if my building isn't fully occupied?

Report the percentage of the building that is occupied when you first create the building within Portfolio Manager. For office buildings with 10% or higher vacancy over 12 months, the vacant space must be input into Portfolio Manager separately from the occupied space as another use type with zero operating hours, computers, and workers. Follow these steps to add a vacant space to your property.

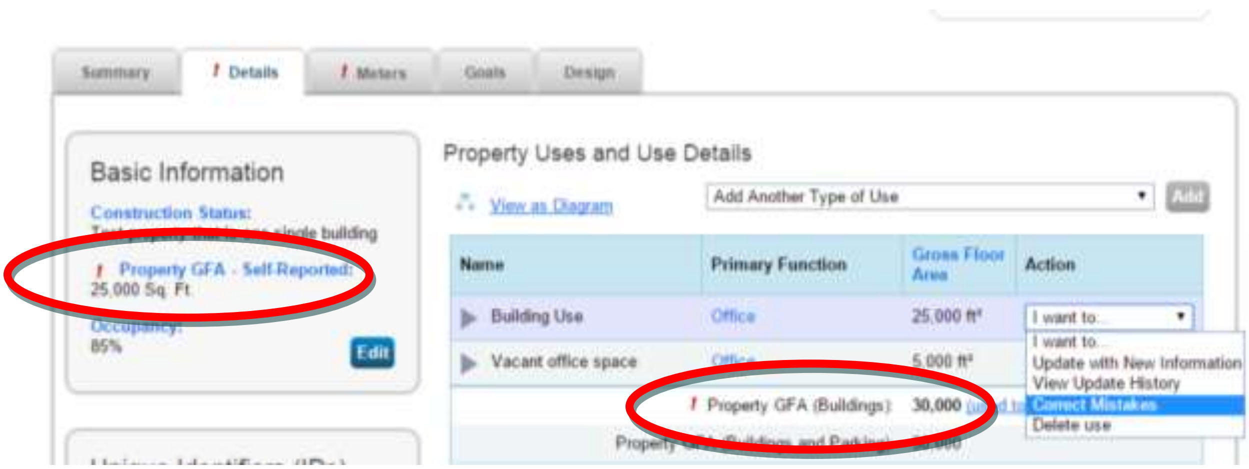
1. Select your property in Portfolio Manager and open the **Details** sub tab.
2. Under Property Uses and Use Details, from the dropdown select the type of use that the vacant area would be if occupied and click "Add."



3. On the page that opens, provide details of this space.
   a. Under name, identify the space as vacant.
   b. Enter the vacant square footage.
   c. Enter 0 for the operating hours, workers, and numbers of computers.
   d. Select the percent heated and cooled for the conditioning occurring in the vacant space.



4. Click "Save Use."
5. Under Property Uses and Use Details, you should now have more than one space use and the applicable square footage for each use.
   a. In some cases, the gross floor area for these uses may now sum to more than the building square footage. There will be an alert "!" next to the Property GFA if this is the case.



   b. In this case, you must select the original property use in the list that currently represents the whole building square footage, and update the square footage to be less than the vacant space.
      i. From the **Action** drop down for the original use, select "Correct Mistakes."
      ii. In the new window, under **Gross Floor Area**, in the column **Value**, update the square footage.
      iii. Click "Save Corrections."
      iv. The property GFA should now match.

8. What if my whole building is rented by a single tenant?

If your building has a single tenant who has assumed management of the entire building, you and your tenant can agree to delegate reporting duties to the tenant. This delegation must be noted in the "Property Notes" section of Portfolio Manager. You must also make sure that this tenant is assigned as the point of contact for this building with the city by **Claiming your Building** on the program website.

9. Are there any energy uses that are not part of my building's energy use?

Cell phone towers, radio masts, and any external billboards used for leased advertising space are not part of building energy use, and may be excluded if submetered. If you are not using whole-building data, and are submetering your parking areas, you may exclude parking area energy use since parking doesn't count towards your gross floor area.

10. What if there is split ownership of the building?

The primary owner listed in the Boulder County Tax Assessor records is responsible for compliance with all aspects of the ordinance. Please refer to the **Affected Building List** on the program website to see the primary owner assigned to each building.

11. What is Source EUI? What is an ENERGY STAR score? How are they calculated?

Energy use intensity (EUI) is the building's energy use per square foot. Source energy accounts for all the energy used in delivering energy to a building, including power generation and transmission and distribution losses. Site energy is the amount of energy consumed by a building as reflected in utility bills. Portfolio Manager typically shows a building's Source EUI, which is a complete assessment of the fuel required for operating the building. When you see Weather Normalized Source EUI, this is an estimate of what the Source EUI would have been in a year with "normal" weather conditions. For example, in a very hot year, Portfolio Manager might estimate your Weather Normalized Source EUI to be lower than your actual Source EUI. This allows an owner to more accurately compare a building's efficiency from year to year.

The ENERGY STAR score is a percentile score, on a scale of 1-100, comparing your building's energy performance with that of similar buildings in the U.S. The score normalizes for climate, weather, building size, number of employees, and other operational factors. A score close to 100 indicates the most energy efficient building. A score of 75 or above qualifies a building for ENERGY STAR Certification.

12. What if my building doesn't receive an ENERGY STAR score?

Only some building types will receive an ENERGY STAR score, due to limitations in the national comparative dataset. Thus, many buildings will submit their energy reports to the City without an ENERGY STAR score. The following building types are eligible for a score:

- Bank branch
- Barracks
- Courthouse
- Data center
- Distribution center
- Financial office
- Hospital (general medical & surgical)
- Hotel
- K-12 school
- Medical office
- Multifamily housing
- Non-refrigerated warehouse
- Office
- Refrigerated warehouse
- Residence hall/ dormitory
- Retail store
- Senior care community
- Supermarket/grocery store
- Wastewater treatment plant
- Wholesale club/supercenter
- Worship facility

If your building type is on the list and you still didn't receive a score, there may be an error in your data or submission. Contact a local PACE Business Sustainability Advisor for free assistance by calling 303-786-7223 or emailing info@PACEpartners.com.

13. How are data centers scored in ENERYG STAR Portfolio Manager?

Portfolio Manager defines a data center as a space "specifically designed and equipped to meet the needs of high density computing equipment such as server racks." You can add a data center as a property use type. To receive an ENERGY STAR score for a data center, IT energy use must be measured at the output of the uninterruptible power supply.

14. Can I use data from an energy or building management system?

Yes, if the system provides accurate whole-building data. Many such systems can upload energy data directly into Portfolio Manager. You must note in "Property Notes" if you do not use utility-provided data, and an explanation of any difference.

15. What if I generate electricity through on-site solar panels?

Onsite green power is not subject to traditional generation, transmission, and distribution losses. As long as you retain the Renewable Energy Credits (RECs), this benefit is reflected in the ENERGY STAR score and Source EUI by assigning onsite electricity a source conversion factor of 1.0 rather than the 3.34 value that is used for grid-sourced electricity. As such, a property with onsite solar or wind power is likely to receive a higher score. The electricity use from onsite solar and wind must be reported and included in your total energy consumption and ENERGY STAR score calculation. The use of onsite renewable electricity is part of your overall site energy consumption (i.e. the energy requirement of your property).

You can enter this into Portfolio Manager when setting up your meters. Obtain data from your installer on the energy used, any energy exported out to the grid, and about any renewable energy certificates generated. If you report your renewable energy generation and use accurately, it will be reflected in your building's greenhouse gas emissions. For additional details on green power, see this document.

16. I have a cell tower that is responsible for some of the energy use at my building. How do I report it?

If the cell tower is sub-metered, you can exclude it from your property's energy use in Portfolio Manager. Simply exclude that meter if you are entering data manually. If you are using Xcel's benchmarking portal to automatically upload whole-building energy consumption, work with Xcel during the set-up to ensure the cell tower sub-meter is excluded from the whole-building data upload.

17. What if the building is under construction or newly built?

A newly constructed building, if it meets the threshold for being affected by this ordinance, is required to report its energy use for the first full calendar year after receiving a Certificate of Occupancy.

18. What if I purchased the building in the past year?

Buildings that have transferred ownership are not exempt from reporting requirements. The reporting regulations require the seller to transfer to the new owner any information that has been collected for completing the energy report.

19. What can I do to make my building more efficient?

ENERGY STAR offers a wealth of resources to improve building efficiency including financial calculators to evaluate energy efficiency measures, the Guidelines for Strategic Energy Management, and the Building Upgrade Manual.

Partners for a Clean Environment (PACE) provides free expert advisor services, financial incentives and a certification program to help businesses measure and gain recognition for their energy, waste, water, and transportation achievements. For free assistance, contact a PACE Business Sustainability Advisor* at 303-786-7223 or info@PACEpartners.com.

**Provided by Boulder County and the City of Boulder Climate Action Plan (CAP) tax dollars supporting businesses and building owners in achieving their energy efficiency goals.*

Not finding your question? Visit ENERGY STAR FAQs here or contact a local PACE Business Sustainability Advisor by calling 303-786-7223 or emailing info@PACEpartners.com. Questions on Xcel Energy's Benchmarking Portal? Email benchmarking@xcelenergy.com.